

Title (en)

COMPOSITE MATERIAL INLAY IN ADDITIVELY MANUFACTURED STRUCTURES

Title (de)

EINLAGE AUS VERBUNDMATERIAL IN ADDITIV HERGESTELLTEN STRUKTUREN

Title (fr)

INCRUSTATION DE MATÉRIAU COMPOSITE DANS DES STRUCTURES FABRIQUÉES DE MANIÈRE ADDITIVE

Publication

EP 3694701 A4 20210818 (EN)

Application

EP 18866747 A 20181009

Priority

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- US 2018054996 W 20181009

Abstract (en)

[origin: US2019105852A1] Techniques for inlaying a composite material within a tooling shell are disclosed. In one aspect, an additively manufactured tooling shell is provided, into which a composite material is inlaid and cured. A surface of the tooling shell is provided with indentations or another mechanism to enable adherence between the composite material and the tooling shell. The resulting integrated structure is used as a component in a transport structure.

IPC 8 full level

B29C 70/30 (2006.01); **B29C 37/00** (2006.01); **B29C 64/10** (2017.01); **B29C 65/00** (2006.01); **B29C 70/34** (2006.01); **B29C 70/54** (2006.01); **B29C 70/86** (2006.01); **B33Y 10/00** (2015.01); **B33Y 80/00** (2015.01); **B29C 70/44** (2006.01); **B29K 105/20** (2006.01); **B29L 31/60** (2006.01)

CPC (source: CN EP KR US)

B29C 37/0082 (2013.01 - EP KR); **B29C 64/10** (2017.08 - US); **B29C 64/118** (2017.08 - CN KR US); **B29C 64/153** (2017.08 - KR US); **B29C 64/386** (2017.08 - CN KR); **B29C 70/06** (2013.01 - KR US); **B29C 70/30** (2013.01 - CN EP US); **B29C 70/342** (2013.01 - EP KR US); **B29C 70/44** (2013.01 - KR); **B29C 70/541** (2013.01 - KR); **B29C 70/84** (2013.01 - KR US); **B29C 70/86** (2013.01 - EP KR); **B33Y 10/00** (2014.12 - CN KR); **B33Y 50/00** (2014.12 - CN KR); **B33Y 70/00** (2014.12 - CN KR); **B33Y 80/00** (2014.12 - CN KR); **B29C 70/44** (2013.01 - EP); **B29C 70/541** (2013.01 - US); **B29K 2009/06** (2013.01 - EP KR US); **B29K 2105/206** (2013.01 - EP KR); **B29K 2507/04** (2013.01 - EP KR US); **B29K 2709/00** (2013.01 - KR US); **B29L 2031/30** (2013.01 - EP KR US); **B29L 2031/608** (2013.01 - EP KR); **B33Y 10/00** (2014.12 - EP US); **B33Y 80/00** (2014.12 - EP US)

Citation (search report)

- [X] CN 107187020 A 20170922 - CN ELECT TECH NO 38 RES INST
- [X] EP 3181325 A1 20170621 - TOYOTA MOTOR CO LTD [JP]
- [X] DE 102009017776 A1 20101021 - EADS DEUTSCHLAND GMBH [DE]
- See also references of WO 2019074916A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 10814564 B2 20201027; **US 2019105852 A1 20190411**; CN 109648843 A 20190419; EP 3694701 A2 20200819; EP 3694701 A4 20210818; JP 2020536769 A 20201217; JP 2022130628 A 20220906; JP 7100122 B2 20220712; JP 7434432 B2 20240220; KR 102522931 B1 20230417; KR 20200055794 A 20200521; US 11584094 B2 20230221; US 2021001568 A1 20210107; WO 2019074916 A2 20190418; WO 2019074916 A3 20190523

DOCDB simple family (application)

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